

CLAIM AMENDMENTS

1. (Currently Amended) A method of preparing particles of a defined size, the method comprising:

providing using a reaction of reactants in a reaction vessel having a first reactant space and a second reactant space, the spaces being separated by a contactor;

introducing a first liquid reactant in the first reactant space;

introducing a second liquid reactant in the second reactant space;

rotating the reaction vessel so that the first reactant space is radially inside and the second reactant space is radially outside;

forming first reactant droplets when the first reactant passes the contactor under influence of a centrifugal force caused by the rotating of the reaction vessel;

transporting the droplets of the first reactant to the second reactant in the second reactant space under influence of the centrifugal force;

forming a, characterized in that the reaction vessel is rotated, so that the reaction is carried out in the presence of rotational forces, wherein the reactants are separated from each other by means of a contactor, which contactor is so constructed that one reactant is contacted with the other reactant(s) under controlled conditions after it has passed the contactor, so as to form the reaction product in the form of particles when the first reactant has been brought into contact with the second reactant, the reaction product having a, wherein the density of the reaction product thus formed is that is greater than that of the second reactant; and

transporting the reaction product particles to a radially outward end of the second reactant space due to centrifugal forces ~~medium in which it has been formed, wherein the reaction vessel is of substantially circular cross-section, and wherein the contactor extends over the entire cross-section of the reaction vessel, perpendicularly to the longitudinal axis thereof.~~

2. (Original) A method according to claim 1, characterized in that a contactor selected from the group consisting of membrane, diaphragm, filter and atomizer is used.
3. (Original) A method according to claim 2, characterized in that a membrane having a defined pore size is used.
4. (Original) A method according to claim 1, characterized in that a rotational force having an acceleration of at least 1000 g is used.
5. (Previously presented) A method according to claim 1, characterized in that said rotational forces are generated by carrying out the reaction in a centrifuge.
6. (Previously presented) A method according to claim 1 characterized in that a membrane of maximally 500 kDa is used.
7. (Previously presented) A method according to claim 6, characterized in that a membrane of maximally 50 kDa is used.
8. (Previously presented) A method according to claim 7, characterized in that a membrane of maximally 3 kDa is used.

9. (Cancelled).

10. (Previously presented) A method according to claim 1, characterized in that the size of the reaction products formed by the reaction ranges from 10-3000 nm.

11. (Previously presented) A method according to claim 1, characterized in that the size of the reaction products formed by the reaction is < 300 nm.

12. (Previously presented) A method according to claim 1, characterized in that the size of the reaction products formed by the reaction is < 50 nm.

13. (Previously presented) A method according to claim 1, characterized in that the reaction products formed by the reaction have a uniform particle size distribution.

14. (Previously presented) A method according to claim 1, characterized in that the reactants are in the liquid phase.

15. (Previously presented) A method according to claim 1, characterized in that the proportion between the density of the reaction product being formed and the density of the medium in which the reaction product is being formed by means of the reaction is at least 1.5:1.

16. (Previously presented) A method according to claim 1, characterized in that the proportion between the density of the reaction product being formed and the density of the medium in which the reaction product is being formed by means of the reaction is at least 2:1.

17. (Previously presented) A method according to claim 1, characterized in that inorganic particles are formed by the reaction.
18. (Original) A method according to claim 17, characterized in that said inorganic particles belong to the group consisting of oxides, carbonates, sulphides, halogenides and cyanides of one or more metals, or combinations thereof.
19. (Previously presented) A method according to claim 1, characterized in that the reaction comprises a precipitation reaction.
20. (Previously presented) Particles obtained by carrying out the method as defined in claim 1, said particles having a particle size ranging from 10-3000 nm.
21. (Original) Particles according to claim 20, characterized in that said particles have a uniform particle size distribution.
22. (Previously presented) Particles according to claim 20 or claim 21, characterized in that said particles have a spherical shape.
23. (Previously presented) Particles according to claim 20 or claim 21, characterized in that said particles have a cubic shape.

24. (Currently Amended) A device comprising a reaction vessel ~~in which reactants separated by means of~~ including a contactor that separates a first reactant space for holding a first liquid reactant and a second reactant space for holding a second liquid reactant, are present; ~~which the reaction vessel being rotatably mounted so that, when the reaction vessel rotates the first reaction space is radially inside and the second reactant space is radially outside, is suitable for rotation, wherein one reactant is contacted with the other reactant(s) under controlled conditions in the presence of rotational forces after it has passed the contactor being configured for forming first reactant droplets when the first reactant passes the contactor under influence of a centrifugal force caused by the rotating of the reaction vessel, wherein the reaction vessel is of substantially circular cross-section, and the contactor extends over the entire cross-section of the reaction vessel, perpendicularly to the longitudinal axis thereof.~~

25. (Cancelled).